XXXIX. *An Account of a Suppreſſion of Urine cured by a Puncture made in the Bladder through the* Anus; *being an Extract of a Letter from Dr.* Robert Hamilton, *Fellow of the Royal College of Phyſicians at* Edinburgh, *and Phyſician at* King's-Lynn, *in* Norfolk, *to Sir* John Pringle, *Bart. P. R. S.*

R. May 23, 1776. I WAS ſent for on the 25th of March, 1774, to viſit JAMES WILKINSON, of about thirty-one years of age, the ſon of a farrier in this town, who had laboured under a ſuppreſſion of urine for three days.

The account this man gave of himſelf was, that he had been fourteen years a ſoldier in a regiment of foot, but had been diſcharged the preceding year as unfit for ſervice, on account of this diſorder, to which he had been long ſubject, and which was ſuppoſed to originate from a ſtone in the neck of his bladder; that, about twelve years before his diſcharge, he had contracted a *gonorrhœa*, which had been badly cured; that, from that period, he had become afflicted with frequent ſuppreſſions of urine, and that every return had been of longer duration than the former; that when the ſuppreſſion had continued ſome time, he had been uſed to go to the Regimental Hoſpital, and to ſtay till it was removed; and that, bleeding,

bleeding, purging, and the warm-bath had been the means uſed for his relief. He added, that the catheter could never be introduced into his bladder from the firſt attack; that the firſt ſigns of relief were a few involuntary drops of urine iſſuing from the *urethra*, after which followed a ſmall thread-like ſtream, which continued to run until the bladder was a little more than half emptied; for he did not think that his urine had at any time been perfectly diſcharged, during the thirteen years he had been afflicted with this painful diſorder. He concluded with telling me, that in other reſpects he had enjoyed good health; and that the preſent ſuppreſſion had been brought on by hard riding on a journey he had undertaken to go expreſs.

This man was in a very diſtreſſed condition. His bladder was diſtended to an enormous ſize, reſembling the gravid *uterus* at that late period of geſtation, when the *fundus* reaches above the navel; to ſuch a degree was it dilated by the repeated ſuppreſſions of urine for ſo many years. His pulſe was ſmall and quick; he had been troubled with a hiccup for many hours, and had vomited every thing he had taken from the firſt day of his illneſs. His head and face were emphyſematous from ſtraining; and the cellular membrane was ſo much inflated, that he could not open his eye-lids. He was attended by two ſurgeons, who had uſed bleeding, opiates, clyſters, fomentations, and the warm-bath, without any benefit; and they had repeatedly attempted to introduce catheters of different ſizes, without ſucceſs; that inſtrument, having paſſed without reſiſtance to the neck

of the bladder, met there with an obſtruction not to be overcome. Under ſuch preſſing circumſtances no time was to be loſt. The patient's life was in imminent danger, either from a rupture, or a gangrene of the bladder. The approach of the latter was ſoon to be apprehended, from the hiccup and ſmallneſs of the pulſe. There was no alternative left; the bladder muſt be ſpeedily emptied by an aperture ſomewhere, or the patient muſt periſh. The ſurgeons, therefore, went to prepare their inſtruments for making an opening into the bladder. Reflecting, in their abſence, on the moſt eligible method of performing the operation, I was in ſome degree of perplexity; for I did not much approve of any of the methods recommended by the beſt chirurgical writers; either that of making a perforation above the *os pubis*, in the place where the higher operation of lithotomy is performed; or that of the puncture *in perinæo*. Whilſt I was conſidering what was to be done, the mother of the patient told me, that ſhe had ſeveral times that day attempted to give him a clyſter, but had not been able to introduce the pipe, by reaſon of a large ſubſtance low in the gut near the fundament, which ſtopped up the paſſage. It immediately occurred to me, that the obſtructing body could be no other than the diſtended bladder, which, having filled the *pelvis*, preſſed downwards where there was the leaſt reſiſtance towards the *anus*, as well as upwards into the *abdomen*. From this circumſtance I was led to think, of diſcharging the urine by a puncture into the bladder, with a trocar introduced by the *anus*. I conceived that this method would have advantages ſuperior

to

to any other that I had heard of, for ſimplicity, eaſe, and ſafety. The finger could guide the point of the inſtrument to the very ſpot of the bladder to be pierced. The coats of the *inteſtinum rectum* and bladder, and the intervening cellular membrane, were all that were to be perforated, and they were now preſſed ſo cloſely together, that there could be no more art required than in piercing any ſimple bag of water. When the ſurgeons returned, I told them what had occurred to me concerning the deſcent of the diſtended bladder (for I had not yet examined it) and its preſſing the *rectum* downwards; I repreſented to them the hazard and difficulty attending the operation hitherto in uſe, and propoſed this method of perforating the bladder with a trocar introduced by the *anus*. They readily acknowledged the advantage of ſuch a practice, and agreed to give it the preference. We examined with a finger *in ano*, and felt a large round tumor, a very little way within the orifice, preſſing the anterior ſide of the *rectum* downwards, and puſhing the *anus* and *perinæum* conſiderably outwards. The gut itſelf was looſe and empty; and through its relaxed ſides the tumor, which was evidently the bladder, was diſtinctly felt ſtretching every way, completely filling the *pelvis*, and feeling like the membranes which contain the waters of a woman in labour, thruſt into the dilated *vagina*. I deſcribed the manner in which I thought the puncture ſhould be made; and, as I imagined that I could better execute what I had myſelf conceived than another perſon, I offered to do it; which being readily aſſented to,

the operation was performed in the following manner. Having placed the patient on his back on a bed, with his breech projecting a little over the ſide of it towards the light, and his legs bent into the poſition they are placed in for the operation of lithotomy, and held by two aſſiſtants, a trocar of the middle ſize, with its point guarded by the extremity of the fore-finger well oiled, was introduced into the *anus*, until the tip of the finger reached the anterior part of the tumor; when the finger being a little withdrawn, and the point of the inſtrument brought into contact with the tumor, it was plunged into it, in a direction parallel to the axis of the bladder, in an erect poſture; and the perforator being pulled out, the water immediately followed. A ſtraight catheter was quickly introduced through the canula into the bladder, leſt, as it collapſed and ſhrunk upwards as the water was diſcharged, the canula ſhould prove too ſhort, for its ſhell was then cloſe to the *anus*. The canula was then ſlipped out of the aperture as far as the rings of the catheter, as being no longer of uſe, and the catheter remained in the bladder until the urine was all drawn off; during which time, that inſtrument was moved different ways, to ſearch for the ſtone which was ſuppoſed originally to have occaſioned the diſorder; but none was to be found. The water being diſcharged, the catheter was taken out, and the patient put to bed. The parts were repeatedly fomented; and a draught, with half a drachm of nitre and 25 drops of laudanum were given, and two more of the ſame kind were ordered for the night.

26th,

26th, He had had a very good night, and had made water five or ſix times through the aperture made by the trocar. He ſaid, that as ſoon as the bladder had collected a certain quantity of urine, he had felt an inclination to make water; that then ſitting on a chamber-pot or bed-pan, and ſtraining in the uſual way, the urine had ruſhed out at the aperture *per anum* in a ſtream; and that none had paſſed by the *urethra*. Not contented with his account of the matter, I deſired him to make water in my preſence, and was witneſs to this curious and extraordinary power of retention of the urine in a wounded bladder, and of diſcharging it at pleaſure through an artificial paſſage. The emphyſematous ſwelling of his head and face was almoſt gone. He was directed to drink the pectoral decoction with the addition of ſome marſh-mallow root, ſweetened with manna, and acidulated with orange or lemon-juice; and the nitrous opiate was repeated.

27th, He complained of a fulneſs of his belly, probably owing to his not having had a ſtool. He ſtill made water through the trocar-aperture as before, and whenever he pleaſed; but now he began to perceive a little urine come by the *urethra* at the ſame time. We did not chooſe to order a clyſter, leſt the gut ſhould be injured by the pipe, but to wait the effect of the manna, which, with the night-draught, was ſtill continued. The reſolution of the inflammation being now begun, as was conjectured by the urine finding its natural paſſage by the *urethra*, a bougie was introduced beyond the ſtricture at the neck of the bladder, and to very good purpoſe.

28th,

28th, He was much better, he had had ſome ſtools, and had paſſed moſt of his urine by the *urethra.*

30th, No water had iſſued through the aperture either this morning or the preceding day; the whole, though in a ſmall ſtream, had flowed by the *urethra.* He complained of a ſoreneſs *in ano.*

31ſt, This day he felt that ſoreneſs only when he went to ſtool. The ſtream of urine by the *urethra* was ſtill ſmall.

April 6th, The puncture through the *rectum* and bladder appeared to be quite healed. The urine was diſcharged in a tolerable ſtream, the paſſage being, as he obſerved, much wider than it had been for thirteen years before.

He continued the daily uſe of the bougies; and, being ſenſible of the great benefit he had received from them, willingly perſevered in their uſe, until the ſtricture was ſo much leſſened, as to permit a free diſcharge of his water, and by theſe means he obtained a complete cure: for, in two months after, he left the town in every reſpect well. It was remarkable, that, during the progreſs of the cure, no urine was perceived to ooze involuntarily through the opening; but it was always retained until the patient, prompted by a fulneſs of the bladder, made his water, as has been related.

Having given as accurate an account of this caſe as I am able, I muſt now, SIR, in juſtice to myſelf, beg leave to aſſure you, that I had neither heard, nor read, of any method of perforating the bladder, ſimilar to that which I have related, before you kindly informed me in your

laſt letter, that it was not a new operation; and that I ſhould find an account of it in POUTEAU's *Melanges de Chirurgie*. I have procured the book, and have read the paper with great ſatisfaction, and am much obliged to you for your intelligence. I do not preſume to claim any merit from a thing which took its riſe from mere accident. The obſtruction which the pipe met with when the patient's mother attempted to give him the clyſter, ſuggeſted the method of piercing the bladder by the *anus*; and I am perſwaded, that the ſame thought would have ariſen, on a like occaſion, in the mind of any thinking man. And I beg you would believe, that I have no ſmall ſatisfaction in finding it occurred to M. FLURANT, the ingenious author of the paper on that ſubject, in that publication, from a circumſtance, which, though not exactly ſimilar, amounted nearly to the ſame thing. This ſurgeon having introduced his finger into the *anus*, to examine the ſtate of the bladder, in order to perform the puncture *in perinæo*, found it ſo round and tumid, and ſo much within the reach of his inſtrument, that he thought he could perforate it with ſafety in that place; and, from a little reflection on the ſtructure of the parts, was convinced of the expediency of operating in this manner, in preference to any other.

Before I quit this ſubject, I think it proper to acquaint you, that I have found a compoſition of calomel and opium, in large doſes, the beſt internal remedy for ſuppreſſions of urine, in general; and that I have repeatedly ſeen this medicine ſucceed after the uſual means have failed. I am convinced,

convinced, from theſe trials, that the principal or ſpecific efficacy is in the calomel, as large doſes of opium alone, or joined with camphire, have proved unſucceſsful. I am ſo well ſatisfied of the advantages of this practice, that, if called early in the diſorder, I direct ten grains of calomel with two grains of ſolid opium, made into a bolus with any conſerve, to be taken immediately, and repeated in ſix hours. I have ſeldom occaſion to order a third doſe, the patient being generally relieved by the ſecond, if the firſt has failed. I did not adminiſter it in the caſe here related, becauſe the alarming ſituation the patient was in when I came to him required the bladder to be emptied without delay.